

IN THE CLAIMS:

Please amend Claims 1, 7, and 8 and add new Claim 9 as follows.

1. (Currently Amended) An encoding apparatus for variable length packetizing variable-length encoding image data by a packet format in which a header of a packet has a code area indicating the value of packet length, wherein the code area describes a code indicating a packet length in a case where the packet length is less than or equal to a predetermined value, and describes a code indicating not to decide a packet length in a case where the packet length is larger than the predetermined value, comprising:

a) inputting means for inputting variable-length encoding image data which includes a picture header indicating the start of one picture;

b) header detecting means for detecting the picture header input by said inputting means;

c) data length detecting means for detecting whether a data length of variable length encoding image data for one frame input by said inputting means reaches the predetermined value value, ~~wherein the predetermined value is less than or equal to a maximum value of the packet length which can be specified in the code area;~~ and

d) packetizing means for variable-length packetizing the variable-length encoding image data in accordance with output of said header detecting means and said data length detecting means,

wherein said packetizing means divides the one frame into the predetermined value and performs packetizing in the case where the data length of variable-length encoding

image data of the one frame is larger than the predetermined value, and performs packetizing without dividing the variable-length encoding image data in the case where the data length of variable length encoding image data of the one frame is less than the predetermined value.

2. (Previously Presented) An encoding apparatus according to Claim 1, wherein said packetizing means generates a PES packet corresponding to data conforming to an MPEG system from the variable-length encoding image data.

3. (Original) An encoding apparatus according to Claim 2, further comprising second packetizing means for applying second packetization to packet data packetized by said packetizing means, by a predetermined data length.

4. (Original) An encoding apparatus according to Claim 3, wherein a packet generated by said second packetizing means is a TS packet.

5. (Original) An encoding apparatus according to Claim 4, further comprising pickup means for capturing an image of an object and for generating image data; and encoding means for applying variable-length encoding to the image data.

6. (Previously Presented) An encoding apparatus according to Claim 1, further comprising recording means for recording the variable-length encoding image data packetized by said packetizing means into a recording medium.

7. (Currently Amended) An encoding method for variable-length packetizing variable-length encoding image data by a packet format in which a header of a packet has a code area indicating a value of packet length, wherein the code area describes a code indicating a packet length in a case where the packet length is less than or equal to a predetermined value, and describes a code indicating not to decide a packet length in a case where the packet length is larger than the predetermined value, comprising the steps of:

an inputting step of inputting variable-length encoding image data which includes a picture header indicating the start of one picture;

a first detecting step of detecting the picture header input in said inputting step;

a second detecting step of detecting whether a data length of variable length encoding image data for one frame input in said inputting step reaches the predetermined value ~~value, the predetermined value being less than or equal to a maximum value of the packet length which can be specified in the code area;~~ and

variable-length packetizing the variable-length encoding image data in accordance with an output of said first and second detecting steps,

wherein the variable length packetizing divides the one frame into the predetermined value and performs packetizing in the case where the data length of variable-length encoding image data of the one frame is larger than the predetermined value, and performs packetizing without dividing the variable-length encoding image data in the case where the data length of variable length encoding image data of the one frame is less than the predetermined value.

8. (Currently Amended) A recording medium which can be read by a computer and which records a program for variable-length packetizing variable-length encoding image data by a packet format in which a header of a packet has a code area indicating a value of packet length, wherein the code area describes a code indicating a packet length in a case where the packet length is less than or equal to a predetermined value, and describes a code indicating not to decide a packet length in a case where the packet length is larger than the predetermined value, the program comprising codes to perform:

input processing for inputting variable-length encoding image data which includes a picture header indicating the start of one picture;

first detection processing for detecting the picture header input by said input processing;

second detection processing for detecting whether a data length of variable-length encoding image data for one frame input by said input processing reaches the predetermined value ~~value, the predetermined value being less than or equal to a maximum value of the packet length which can be specified in the header;~~ and

packetizing processing for variable-length packetizing the variable-length encoding image data in accordance with output of said first and second detection processing,

wherein said packetizing processing divides the one frame into the predetermined value and performs packetizing in the case where the data length of variable-length encoding image data of the one frame is larger than the predetermined value, and performs packetizing without dividing the variable-length encoding image data in the case where the data

length of variable length encoding image data of the one frame is less than the predetermined value.

9. (New) An encoding apparatus for variable-length packetizing variable-length encoding image data by a packet format in which a header of a packet has a code area indicating the value of packet length, wherein the code area describes a code indicating a packet length in a case where the packet length is less than or equal to a predetermined value, and describes a code indicating not to decide a packet length in a case where the packet length is larger than the predetermined value, comprising:

an inputting unit that inputs variable-length encoding image data which includes a picture header indicating the start of one picture;

a header detecting unit that detects the picture header input by said inputting unit;

a data length detecting unit that detects whether a data length of variable-length encoding image data for one frame input by said inputting means reaches the predetermined value; and

a packetizing unit that variable-length packetizes the variable-length encoding image data in accordance with an output of said header detecting unit and said data length detecting unit,

wherein said packetizing unit divides the one frame into the predetermined value and performs packetizing in the case where the data length of variable-length encoding image data of the one frame is larger than the predetermined value, and performs packetizing

without dividing the variable-length encoding image data in the case where the data length of variable length encoding image data of the one frame is less than the predetermined value.